

ABSTRACT OF THE DISCLOSURE

The present invention relates to plasma etching apparatus adapted to a semiconductor fabrication process, etc. which includes a process chamber which may be set to a high pressure sensitive environment and has a certain part which

5 is formed of a conductive member, an introduction unit for introducing an etching gas into the process chamber, an eventuation unit for eventuating the process chamber, an electrode unit which is formed of a first electrode exposed in the process chamber and having a mounting surface on which a substrate which will be etched is mounted, and a second electrode exposed in the process chamber

10 and being opposite to the mounting surface of the first electrode and having conductivity, a power supply unit for applying a RF voltage to both electrodes for generating an electric field between the first electrode and second electrode, and an electric field generation unit which includes at least one coil block provided in a back surface of the conductive member and surrounding the process chamber for

15 forming an electric field which is sequentially rotatable in the process chamber and which generates a magnetic field between the first and second electrode for thereby being orthogonal to the electric field based on a variable voltage and current.